Energy Smart
Industrial
BPA ENERGY EFFICIENCY

Fact Sheet for Industrial Facilities

January 2011

Overview

Public utilities in the Pacific Northwest serve more than 2,000 megawatts of industrial load, making industrial sector users a vitally important factor in BPA's energy efficiency programs. BPA has a long history of supporting and advancing energy efficiency within the industrial sector throughout the northwest.

BPA launched the Energy Smart Industrial (ESI) program to assist BPA utility customers and their industrial facility customers in increasing cost-effective energy savings to support the efficiency goals as found in the Sixth Power Plan. The program is a primary mechanism for BPA utility customers to achieve industrial load energy savings targets of 12 aMW in fiscal year 2010 and 15 aMW in fiscal year 2011, nearly double the energy savings that were achieved in the previous two years. The ESI program encompasses all BPA-offered industrial sector programs moving forward, and is designed to bring regional consistency to BPA utility customers and their end users.

BPA industrial sector staff and dedicated engineers provide overall ESI program management as well as project technical review and approval. The BPA program partner Cascade Energy Engineering and its subcontractors, Evergreen Consulting and Strategic Energy Group, work with BPA and utilities to provide a variety of services to regional utilities and their industrial users. These services include project development, marketing, Technical Service Proposal (TSP) consultant contracting, and implementation of industrial sector energy efficiency acquisition.

The ESI program works with industrial facilities through their local public utility to deliver cost-effective energy savings in all industrial market segments. There are a wide variety of program options for all industry sizes and budget levels. Through participation in the ESI program, industrial end users can save money and energy, and may increase productivity and profitability.

The ESI program staff includes specific market segment experts, including but not limited to: pulp and paper, wood products, food processing, high tech, data centers, water/wastewater, and mining. The ESI program provides technical expertise and resources to assure industrial projects meet quality assurance standards and are completed as planned; not only that, these professionals work with industries to develop a customized solution that protects their privacy and minimizes the impact to their production process, while delivering the highest return-on-investment possible.

Timeline

The ESI program began on October 1, 2009 and should last through at least September 30, 2011, with subsequent program renewal considered thereafter.

Reimbursements

As of April 1, 2010, the reimbursement level for new and retrofit projects is $0.25 / kWh up to 70% of incremental project cost, for qualifying measures.

ESI Program Components

ENERGY SMART INDUSTRIAL PARTNER (ESIP): The ESIP is a dedicated industrial energy efficiency expert assigned by the ESI program who will provide utility staff with a single point-of-contact for coordinating the ESI program and its resources. This knowledgeable facilitator will aid participating utilities in achieving the goals and meeting the needs of their conservation program. In addition to providing technical expertise and other assistance to utility staff, the ESIP assists in representing the ESI program to utility end users (when requested), and facilitates the development and implementation of industrial projects. ESIPs are provided, assigned, and managed by the ESI program. Utilities continue to be the face of industrial energy efficiency to their end users and will define the "rules of engagement" for ESIP interaction with their end users.

ENERGY MANAGEMENT: Energy Management is a pilot component of the ESI program that addresses the opportunities to acquire energy savings through improved operations and maintenance (O&M) and management practices. There are three core features of Energy Management:

1. **Energy Project Manager co-funding –** The goal of Energy Project Manager co-funding is to increase end user management and engineering efforts devoted to electrical energy projects/activities and increase the number of industrial projects submitted. Participating end users set their annual (verifiable) energy savings goal and receive co-funding proportionate to that goal (subject to minimum and maximum co-funding levels). If the end user meets these verified energy savings goals on schedule, co-funding continues. If however, milestones are missed, co-funding could be suspended and/or ultimately ended.
2. **Track and Tune Projects –** Track and Tune is designed to financially and technically help the end user "do the little things well" while installing a tracking system that allows ESI program staff and end users ability to track energy performance and savings over multiple years. Track and Tune centers on operations and maintenance (O&M) savings, instead of large capital projects. To achieve solid savings on industrial projects, Track and Tune continuously tracks the performance of the area of focus (e.g., whole facility, system, or process). This tracking establishes the baseline, shows the effect of the initial tune-up effort, and tracks the performance over the long haul. This methodology transforms industrial O&M improvements into a reliable, long-term source of savings.
3. **High Performance Energy Management –** High Performance Energy Management provides training and support to end users on how to implement energy management into their core business practices. High Performance Energy Management is the application of the principles and practices of continuous improvement to energy management within an end user's organization.

SMALL INDUSTRIAL MEASURES: The Small Industrial component provides a cost-effective mechanism to handle specific efficiency measures where the energy savings on individual projects are small in relation to typical industrial projects. This allows the ESI program to target small-scale industrial facilities and small systems that are historically underserved by traditional industrial efficiency programs. Currently, small compressed air (<75 hp) measures are included in Small Industrial. Additional technologies (e.g., refrigeration, variable frequency drives, etc.) may be added in the future.

ENHANCED LIGHTING: Enhanced Lighting can be considered an extension of the existing Northwest Trade Ally Network to drive more industrial lighting projects. Industrial Lighting Specialists are assigned to participating utilities to assist in these efforts.

ENHANCED TSP: This includes expansion and enhancement of traditional TSP services, including quick-response time and materials work, and BPA funding of scoping, detailed assessments, and measurement and verification activities where appropriate.

For more information, please contact your Energy Smart Industrial Partner or Jennifer Eskil | jleskil@bpa.gov | 509-527-6232.

The BPA Energy Smart Industrial program is sponsored by your local public utility and the Bonneville Power Administration.

Learn more at www.EnergySmartIndustrial.com